

**In the Abstract:**

Please replace the abstract as filed with the following new abstract:

--A detector system for detecting a chemical substance, the system being of the type comprising a measurement sensor for selectively sensing the chemical substance to be detected, and a measurement unit associated with the measurement sensor for the purpose of being connected to a processor unit to determine whether said chemical substance for detection is present or absent. The measurement sensor comprises an olfactory neuron selected for selectively sensing the chemical substance to be detected, and the olfactory neuron is secured to a support in order to co-operate with the measurement unit.--